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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/502,812

02/09/2000

Bert D. Cook JR.

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22888 7590 12/03/2007
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EXAMINER

WALSH, DANIEL I

ART UNIT	PAPER NUMBER
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2876

MAIL DATE	DELIVERY MODE
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12/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	09/502,812		COOK ET AL.	
	Examiner		Art Unit	
	Daniel I. Walsh		2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 and 66-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 10-18, 23-40 and 66-72 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 9 and 19-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9-07, 5-07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of the Amendment received on 9-13-07.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Okaya et al. (US 5,625,534).

Re claim 1, Okaya et al. teaches a portable card (PCMCIA card 24 that has a reader) where there is an accessible embedded storage member disposed inside having at least one layer of storage material for storing information and being movable to embed or extract from the hollow area (FIG. 2, which shows a magnetic strip card inserted into the PCMCIA card to be read). The Examiner notes that the strip card can be inserted into the PCMCIA card and that it can be extracted to facilitate processing of the card information, such as from a different device.

Re claim 2, the storage member is in the form of an elongated strip member (magnetic strip card).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Harrari et al. (US 2007/0016704).

Re claim 1 and 3, Harrari et al. teaches a removable mother card where a daughter card can be inserted and removed therefrom, the removable daughter card including a hard disc including its disk (paragraph [0063] and FIG. 1). The removable daughter card can be embedded in the mother card or also removed where it can be processed in another system.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-8, 10-18, 23-24, 26-29, rejected under 35 U.S.C. 103(a) as being unpatentable over Okaya et al., as discussed above.

Re claim 6, Okaya et al. teaches the limitations above re claim 1. The Examiner notes that though silent, the card can be read by a separate processing station, as is conventional in the art for cards and their reading. Re claim 7, the magnetic strip card is a magnetic medium. Re claim 8, Okaya et al. teaches that the card can be optical, in the discussion of FIG. 1. Re claim 10, though silent to high coercivity, the Examiner notes it is well known and conventional in the art to have high density and high coercivity magnetic materials in order to have increased data capacity and reduced effects from stray magnetic materials, and therefore is an obvious expedient. Re claim 11, the Examiner notes that the use of protective layers to cover magnetic card strips is well known and conventional, to protect the strip from wear/damage, and therefore is an obvious expedient. Re claim 12, the Examiner notes the card can be moved relative to a data processing station, such as when the card is placed in a data processing station to be processed. Re claims 13 and 14, the Examiner notes that as PCMCIA cards are generally understood to be portable, it is therefore obvious to one of ordinary skill in the art that the data processing station be moved relative to the substrate or that both the substrate and data processing station could be moved relative to each other, such as is possible with portable devices, for example, Where the data processing station could be the system the PCMCIA card is inserted into, or a separate system, for example. Re claims 15-17; the limitations have been discussed above. The Examiner notes that the data processing system with station can be interpreted as the system the card is inserted into, for example. Re claim 18, though silent to a film, the Examiner notes that magnetic strips can be interpreted as films, and that such fields/films have an orientation (predetermined) to permit writing and reading to be able to be performed, without adding undue thickness to the card. Re claims 23, 24, the limitations have

been discussed above. Re claims 26-28, the Examiner notes that it is well known and conventional in the art that magnetic cards can include a plurality of magnetic stripes. One would have been motivated to do this for additional accounts, reducing improper orientation of the card since it can be read when inserted either way, or for backup/additional storage. Re claim 29, the use of a magnetic strip card with an integrated circuit chip is also well known and conventional in the art, so as to be able to be used by systems which still use the older strip technology, and those which use more security chip technology. Chip technology provides known security and space advantages. Re claims 66-71; the limitations have been discussed above.

7. Claims 6, 12, 13, 14, 15-17, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrari et al., as discussed above.

Re claim 6, Harrari et al. teaches the limitations above re claim 1. The Examiner notes that though silent, the card can be read by a separate processing station, as is conventional in the art for cards and their reading. Re claim 12, the Examiner notes that the card can be moved relative to a data processing station, when brought to a data processing station to be read. Re claims 13 and 14, the Examiner notes that as PCMCIA cards are generally understood to be portable, it is therefore obvious to one of ordinary skill in the art that the data processing station be moved relative to the substrate or that both the substrate and data processing station could be moved relative to each other, such as is possible with portable devices, for example, Where the data processing station could be the system the mother/daughter card is inserted into, or a separate system, for example. Re claims 15-17; the limitations have been discussed above. The

Examiner notes that the data processing system with station can be interpreted as the system the card is inserted into, for example. Re claims 23-25; the limitations have been discussed above.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okaya et al., as discussed above, in view of Bloodworth (US 4,271,351), as cited in the previous Office Action.

Re claim 18, the teachings of Okaya et al. have been discussed above, but Okaya et al. is silent to a thin film.

Bloodworth teaches a magnetic film (26), interpreted as a thin film.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Okaya et al. with those of Bloodworth.

One would have been motivated to combine the teachings of Okaya et al. with those of Bloodworth in order to provide a means to encode data without adding excess thickness to the card.

9. Claims 29-36 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okaya et al., as discussed above, in view of West et al. (US 5,714,474), as discussed in the previous Office Action.

Re claims 29-36 and 72, the teachings of Okaya et al. have been discussed above. Okaya is silent to a transducer and related claim limitations.

West et al. teaches such limitations (col 1, lines 39+), an inductive head/transducer, and a magnoresistive head (abstract). Though silent to a GMR and thin film head, the Examiner notes that such heads are also well known and conventional and an obvious expedient, for reliability when reading the strips. One would have been motivated to use such reading means based on system constraints, cost, and reliability factors. The mere claiming of alternative reading devices

for reading stored data cards are an obvious expedient, to reliably read a magnetic strip card, based upon system constraints, costs, expected results, etc.

10. Claims 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okaya et al., as discussed above, in view of Kenneth et al., as cited in the previous Office Action.

Re claims 37-40; the teachings of Okaya et al. have been discussed above.

Okaya et al. is silent to an oxide layer (claim 39).

Kenneth teaches such limitations (col 1, lines 30+).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Okaya et al. invention of Kenneth et al.

One would have been motivated to do this to provide a means for data storage (magnetic) that is conventional in the art and provides expected results.

Though silent to the methods of forming the stripe, the Examiner notes that such methods are known and conventional in the art, and one would have been motivated to use such methods based on design/system constraints, costs, and other factors. Further, the Examiner notes that the method of forming a device is not germane to the device itself; and therefore is not given patentable weight, as the device teaches a magnetic structure which is capable of being formed by such known means.

11. Claims 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okaya et al., as discussed above, in view of Hasebe, as discussed in the previous Office Action.

Re claims 37-40; the limitations of Okaya et al. have been discussed above.

Okaya et al. is silent to sputtering (claim 37).

Hasebe teaches such limitations (solution).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Godfrey with those of Hasebe.

One would have been motivated to do this in order to deposit thin layers for magnetic storage.

Though silent to other methods of forming the stripe, the examiner notes that such methods are well known and obvious expedients, as discussed above, and further, that the method of forming a device, is not germane to the patentability of the device itself.

12. Claims 34-36, 71, and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okaya et al., as discussed above, in view of Sedley, as discussed in the previous Office Action.

Re Claims 34-36 and 70-72, the teachings of Okaya et al. have been discussed above.

Okaya et al. is silent to isotropic/anisotropic materials.

Sedley teaches such materials (col 10, lines 57+).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Okaya et al. with those of Sedley.

One would have been motivated to do this to have suitable magnetic materials for reading and writing, with magnetic polarization in different directions so as to be processed by conventional technology (fields in orthogonal or parallel directions).

Re claims 34-36, the Examiner notes that depending on the orientation of the card and the processing station (external for example), parallel, perpendicular, or acute orientation can occur. As fields are a known property, moving the substrate/card can result in different field orientation. Further, it is understood that anisotropic/isotropic materials can cause field orientations to be normal or even acute when placed near stations, for example. Mere movement, further, can read

upon the claims, as they do not recite that such orientations occur when the card is actually read. Additionally, platinum is isotropic, and the selection of a material of known properties is an obvious expedient. The use of MR heads, also, is well known to read anisotropic strips, and therefore is an obvious expedient to produce expected results.

Allowable Subject Matter

13. Claims 4, 5, 9, and 19-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 73-76 are allowed.

14. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach the structural relationship of the substrate re claim 4, magneto optical mediums re claim 9, the structure of the protect coating re claim 19 and that it's a magnetically encoded card re claim 73.

Response to Arguments

15. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (See PTO-892).

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

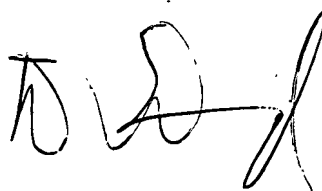
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel I Walsh
Examiner
Art Unit 2876

A handwritten signature in black ink, appearing to read 'D. Walsh', with a stylized flourish at the end.

DANIEL WALSH
PRIMARY EXAMINER